

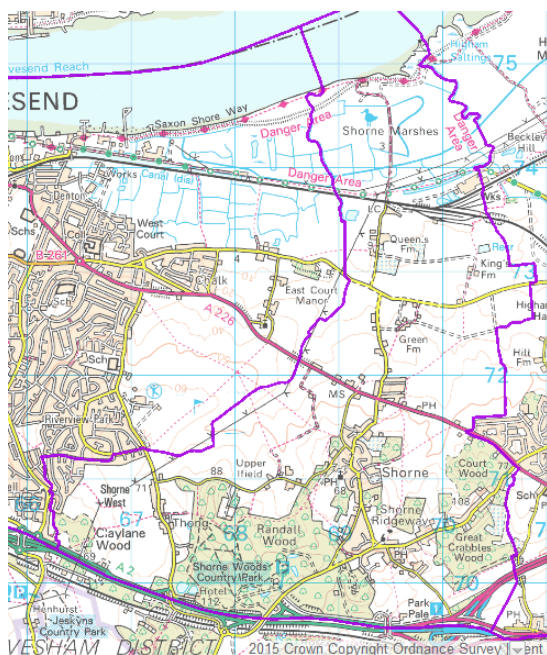
## **SHORNE PARISH COUNCIL**

### **RESPONSE TO HIGHWAYS ENGLAND SUPPLEMENTARY CONSULTATION (January to April 2020) REGARDING THE LOWER THAMES CROSSING**

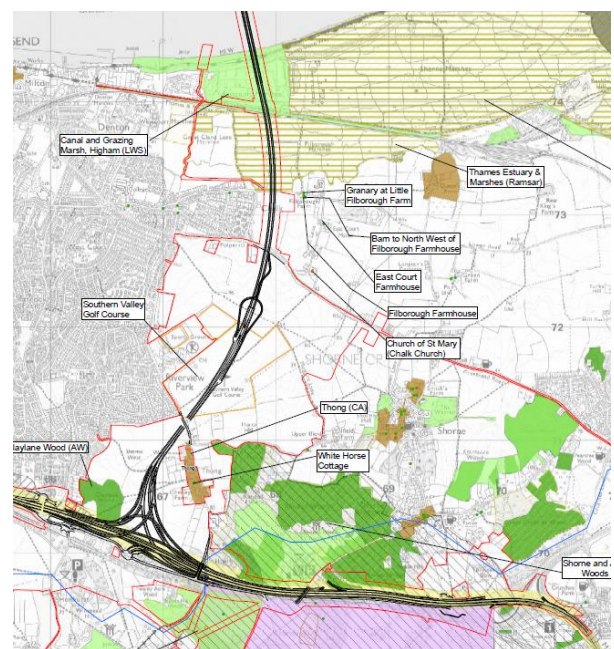
#### **SECTION 1: INTRODUCTION**

Shorne Parish Council is a Local Authority constituted under the Local Government Acts. The Parish is located to the east of Gravesend, in the Borough of Gravesham in the north-west of the county of Kent and is therefore in the western part of the Thames Gateway and Thames Estuary.

Shorne (including Lower Shorne, Shorne West, Thong/Riverview, Shorne Ridgeway and Pear Tree Lane) is an ancient settlement and Parish located in the Green Belt (plus including other supposedly higher protection designation land types). It is bounded by Chalk and the urban border of Gravesend to its west, and Higham Parish and the Medway Towns to the east. It extends from the middle of the A2 in the south to the middle of the Thames in the north and therefore additionally encompasses part of the North Kent Marshes Special Protection Area and the adjacent part of the Ramsar site.



*Boundaries of Shorne Parish*



*Highways England Land Use and "Red Line" Boundary*

The Parish Council has responded to all the previous iterations of the Lower Thames Crossing proposals, including the November 2017 Planning Inspectorate consultation on the Environmental Impact Assessment Scoping Opinion and the 2018 Statutory Consultation.

As can be seen from comparing the two maps above, the bulk of the LTC project roadbuilding and road widening will occur within the Parish. Shorne Parish will, if Highways England's proposal goes forward, lose a very large area of land: Green Belt that is supposed to be protected from development and designated as a Strategic Gap preventing urban sprawl between the built up areas of Gravesend and the Medway Towns. It is the first remaining piece of countryside north of the A2 as one heads east from central London. The proposal would divide Shorne Parish either side of a massive road and junction complex, permanently taking and destroying Green Belt land (that we and others have spent decades working to protect) as well as highly productive agricultural land, ancient woodlands, sites of special scientific interest etc. The clean air and tranquillity of the area will be destroyed forever, as will the amenity of local parks, walking routes and the Area of Outstanding Natural Beauty.

The proposals presently under consultation again involve very much greater take of land, including woodland and ancient woodland, than previously suggested. It is a matter of great concern locally that participants in the 2016 and 2018 Consultations were misled, particularly about the size of the junction with the A2 and the extent of environmental destruction proposed.

In order to prepare our response, Parish Councillors met with Parishioners individually and at the Highways England Information Event (one of the Mobile Information unit visits unfortunately had to be cancelled), and also generated and noted discussions on Social Media. No meetings were offered with Officers at Gravesend Borough Council and/or Kent County Council: they had been bound by "Gagging Clauses" that had been imposed by HE, which they considered prevented them from sharing information such as detailed traffic data. We do not regard this as being compatible with a proper mode of consultation.

The Parish Council hereby submits the following comments as its official response to the present Consultation (January to April 2020). We largely confine our comments to the Parish itself and, as before, we will also submit an on-line response in order to answer the Consultation questions. We have read through the published documents associated with the present 2020 Supplementary Consultation however we cannot practicably raise in this response every point that has been identified.

As this is a Supplementary Consultation that builds on the previous 2018 Statutory Consultation and cross-references to the same documents, so our present comments should also be taken together with our previous on-line and written responses although similarly, much remains unchanged. We have used the same structure for the submission as previously.

## **SECTION 2: STRUCTURAL ISSUES**

### **2.1 TUNNEL ENTRANCE LOCATION**

We are pleased to note that the tunnel entrance has been moved a further 350m to the south and therefore the need for the NG7 footpath bridge has been removed. However, we would like to see the covered section extended still further, whether by longer tunnelling or more extensive cut-and-cover. Due to the depth of the excavations we do not think this would cause any difficulty in

providing road signage at the correct positions. Drivers entering the tunnel from north to south are likely to know (and have had advance signage about) which lane they need to be in on leaving.

This would continue to have a number of advantages:

- Further reduction of noise, light and air pollution to Chalk Church, Crematorium, local residents, the A226 and North Kent Marshes.
- Less excavation would be needed, either due to longer tunnelling or if cut-and-cover is used rather than banked sides. Suitable spoil materials could be used to backfill behind the retaining walls and over the top so reducing landscape impact
- Further Improved ambience of footpaths
- The Emergency Marshalling area could be partly undercover
- Gain of dirty water by the roadway, and consequent risk to the North Thames Marshes and Ramsar site would both be reduced.

***The tunnel entrance should be moved even further south, whether by further tunnelling or by cut-and-cover, as far south as headroom for signage allows. This would have a number of significant environmental and construction advantages.***

## **2.2 “GREEN BRIDGE” STRUCTURE DESIGN; OTHER BRIDGES**

We note with thanks that the Thong Village to Riverview bridge over the LTC has been widened but we would like to see this widened even more. This would further reduce noise, light and air pollution for close nearby residents and further improve the ambience of the route for pedestrians, cyclists and horses/riders.

In our view, a “Green Bridge” is a significantly wide grassed and planted corridor for people and wildlife to cross the line of the new/wider roads without much realising that the road is there, but this has not yet been fully achieved.

As regards other bridges, i.e. Thong Lane crossing the A2 and Brewers Road crossing the A2, the width and therefore greening of these also remains inadequate. The Thong Lane overbridge will be crossing about 20 lanes width of tarmac, without the visual relief presently provided by the wooded central reservation, and without further widening and landscaping will have an ambience than can only be described as appalling. The Brewers Road A2 overbridge area is characterised by wide grassy verges and these should be continued across the bridge on both sides.

***“Green Bridges” must be much wider and with a significant amount of landscaping such that users might not realise at all that they are crossing a motorway. The overall ambience for pedestrians, cyclists and horses/riders needs to be greatly improved.***

## **2.3 GRAVESEND EAST JUNCTION FUNCTIONALITY AND THE SOUTH-SIDE TWO-WAY SIDE ROAD (OLD WATLING STREET); TRAFFIC MANAGEMENT**

In our previous submission we asked for direct access from Gravesend East to the A2 to be restored, but this has only been partially done, although we are grateful for that. The A2 eastbound divides into the “A2”/A289 side link road and the “M2” before the Gravesend East turn-off, and access from Gravesend East is only being provided to the M2 element. This means that traffic for the A289 and Rochester/Strood is forced to go on long and circuitous alternative routes. The project proposes for this to be via the south-side multi-roundabouts, two-way link road route and thence onto the north-side one-way link road eastbound on the north side of Brewers Road overbridge.

We commented previously that the proposed multi-roundabouts system of the south side, two-way link road is not very practical as the large volume of traffic will impede the function of the various junctions, particularly at peak times. This proposal increases traffic by several thousand vehicles per day on the two-way link road, increasing pollution to Ashenbank Wood and increasing the amount of traffic needing to turn right at the Brewers Road T-junction.

Our other concern is over what traffic will do instead in order to avoid that complicated route. Many scenarios can be imagined, all of which will increase traffic on the A2 and M2 in their busiest locations, as well as potentially increasing traffic through villages.

We also restate and have updated the following points:

- Pedestrians, cyclists etc wishing to cross the new two-way link road will need some kind of facilitated crossing point, activating these will hold up the traffic.
- Due to the level of traffic flow, particularly on the southern two-way link road, any accident or breakdown will cause gridlock extending to include the whole of the Gravesend East junction.
- In order to avoid the difficulties and risks created by the expanded roundabouts system, increased traffic will be induced to rat-run out of Gravesend East via Riverview Park and Thong Lane. Increased traffic will also be induced through other local villages of Shorne, Cobham and Sole Street and also on the A226 via Higham to the A289.
- Traffic will also be induced to travel from Gravesend East to the A2:A227 junction via Hever Court Road, Singlewell Road and Chalky Bank or by heading westbound on the A2 to turn back eastbound via the Gravesend Central junction. This “junction hopping” will further impact on the slip roads and roundabouts there, which are already very busy and the principal cause of traffic congestion on the A2 westbound in the mornings.
- There is a new T-junction at Thong Lane which will be difficult for drivers to turn into and out of when trying to move against/across the dominant flow of traffic. It is not clear from the plans as to what turning movements the junction layout facilitates. There have been various suggestions as to how traffic movements here can be improved: traffic lights, roundabout, gyratory between the Halfpence and Henshurst roundabouts. We are unable to say which will be best in the absence of accurate local traffic and air pollution predictions. Roundabouts could better preserve the rural appearance.
- Similarly, at Brewers Road on the north side of the A2, the existing T-junction with the A2 on and off-slip is already problematic. The present layout causes drivers to take risks and results in accidents through misjudgement of vehicle speeds and gap timings. There can be queues on slip roads, which traffic lights might exacerbate. The layout solutions need to be more functional and safer, alternative designs informed by proper local traffic data need to be included in the plans so that there can be a considered judgement.

***The Gravesend East junction should be further redesigned to restore all previous functions by providing a direct slip road link for the “A2”/A289 function.***

***Facilitated crossing points for pedestrians, cyclists and horse-riders need to be added where there is a need to cross various roads.***

***The new T-junction at Thong Lane and the existing T-junction at the Brewers Road north-side A2 on and off slips need further design input to improve traffic flows, movements and safety - these may require additional traffic lights or roundabouts.***

## **2.4 REDUCTION IN NUMBER OF LANES ON M2 EASTBOUND**

The proposals reduce the M2 eastbound to only two lanes through the Gravesend East junction. While the A289 traffic should have already moved onto the north-side link road, we do not believe that two lanes will be adequate for the anticipated levels of traffic heading for the M2. This part of the road must be restored to three lanes or else a new bottle-neck will be built in from the start. The proposal is not “future-proofed”. Future re-widening would be extremely difficult, if not impossible, so adequate capacity needs to be built in now.

***The “M2” eastbound through Gravesend East needs to have three lanes.***

## **2.5 LACK OF HARD SHOULDERS**

Whatever the new/revised roads are labelled (“Smart” Motorway, All Lane Running, Expressway etc), not having a hard shoulder is now widely seen as undesirable. We are very concerned that some sections of the route do not have proper hard shoulders but only occasional and infrequent stopping places. The northern (eastbound) link road only has a “hard strip”, i.e. only 1m wide so not enough to get a vehicle fully out of the way of other traffic.

Our observation is that there are frequently vehicles stopped on the present (very wide) hard shoulder of the A2 eastbound, in the section from the “Inn on the Lake” to the Brewers Road off-slip. This appears to be related to the rising incline which seemingly challenges vehicles which then fail in this area. The LTC will have a long continuous incline for about 2Km, which then continues around the corner heading eastbound. Accordingly, our view is that it is very likely that frequent breakdowns will continue and therefore a proper hard shoulder is essential.

***We request that “hard shoulder” provision should be reviewed throughout the LTC and particularly on the line of the A2/M2 eastbound.***

## **2.6 LACK OF CONNECTION FROM NORTHERN LINK ROAD BACK TO M2 EASTBOUND**

In the previous set of plans there was a direct link from the northern (eastbound) link road back to the M2, this has been removed without reasons being given. The documents state that it has “been replaced by the new link road connecting Valley Drive in Gravesend to the M2 eastbound” but that change does not replace all its functions. Instead traffic e.g. joining at Brewers Road on-slip has to impractically divert a considerable extra distance: northbound up the A289 to the Higham roundabouts and back again to reach the M2 and continue. There does not seem to us to be any great reasons why the removed link should not be reinstated.

The omission does have some advantages: It might discourage rat-running from the LTC to the M2 along the northern link road and it might discourage vehicles from traversing Shorne or Cobham to reach the M2.

Of greater concern is that the A289 is very busy and fairly frequently can be seriously congested. Additional traffic leaving the A289 at Higham will hold up eastbound traffic on the A226. Knowing of the likelihood or experiencing these delays is likely to cause drivers to instead use undesirable routes to get to the M2. Examples are that vehicles approaching from the south over Brewers Road bridge might continue along Pear Tree Lane or through Shorne Village to reach the A226, which requires them to either queue at Higham traffic Lights or make the difficult and risky right turn at Shorne Crossroads – additional traffic lights might be required there. Residents of Riverview will similarly head north to the A226 (another difficult and risky right turn that would also benefit from traffic

lights), and the cumulative effect will be to increase through traffic, and therefore air pollution etc, on the A226 at Higham.

Without access to proper traffic data and a useful traffic model for assessing local circumstances, it is impossible for us to decide what would be the best design to most benefit the Parish.

***We request that the provision of a direct link from the northern (eastbound) link road back to the M2 should be revisited.***

## **2.7 FOOTPATHS, CYCLE ROUTES AND BRIDLEWAYS AFFECTED BY THE PROJECT; NON-MOTORISED USERS OF THE LTC**

The proposed excavation of a very deep cutting severs Gravesend from its green lung and recreation area. The extension of the tunnel by 350m has removed the need for the high bridge at Footpath NG7, and both improvements are very welcome. Several new paths have been proposed but these need further refinement together with KCC PROW and local users.

Bridleways such as NS174 do not so far appear to have been considered, and this needs to be rectified to provide routes for horse-riding as well as walking and cycling. Bridleways need to be separate from walking and cycling routes, which need all-weather surfacing. The proposed new routes presently proposed are not yet differentiated for the different types of user.

This area is used recreationally by a variety of cyclists, both individually and in organised groups. There are two major national cycling routes crossing Shorne Parish: Route NCN 177 on the north side of the A2, and Sustrans Route 1 along the Thames and Medway Canal northern towpath. In addition, the A226 is a UK historic "Tour de France" route which cyclists also follow.

Overall, the ambience of local footpaths, cycle routes and bridleways is being greatly reduced by the proposals. Several will have to cross the line of the new LTC motorway and use or cross assorted service roads and the two-way link road, which will all act as a discouragement to users.

The question of how and where pedestrians, cyclists and horses/horseriders can safely cross the new two-way link roads does not seem to have yet been addressed.

NCN177 is to be diverted to the south side of the A2 – this needs to be done prior to construction in order to maintain continuous use.

For Sustrans Route 1, which is also a much used public footpath, it passes immediately adjacent to the Thames and Medway Canal. We therefore have concerns about whether this will be affected by the works on the Ground Preparation Tunnel. The route also needs to be maintained in operation as there is no viable alternative route.

***Our very busy footpaths, cycle routes and bridleways are impacted by the LTC construction and operational phases. How these routes can be maintained open throughout the LTC works needs to be incorporated into plans. A continuous bridleway should also be provided, to create more of a bridleways network, and other opportunities should be taken to increase connectivity by NMU's.***

***There should be provision for non-motorised users, especially cyclists, to be able to use the LTC crossing as that would provide valuable additional routes between Kent and Essex.***

## **2.8 RED LINE BOUNDARY EXPANSION; ADDITIONAL RESIDENTIAL DEMOLITION; LOSS OF WOODLAND**

We note that overall there has been a 30% further extension of the red line boundary. Locally that leads regrettably to demolition of several additional residential and other properties, which is especially unfair to those residents who will have previously believed themselves “safe” according to previous iterations of the plans. This includes a pair of the historic model farms at Thong Lane, which seems to relate to Utility Diversions.

We are very unhappy about the further loss of Ancient Woodland/SSSI land in the Parish, in particular:

- **Claylane Woods near the A2**, this is a very popular local walking area.
- **The A2 wooded central reservation.** This presently softens the visual appearance and provides some noise and air pollution attenuation. Without it there will be a vista of a greatly widened, bleak and uncompromising, stark sea of concrete and tarmac, completely changing the character of the area. It seems that this has been done in the interest of reducing the area of damage to the AONB but we feel that this has not been achieved and that actually the present proposals have greater visual, noise and air pollution impact. We therefore suggest that it should be as much as possible reinstated in the plans.
- For reasons that appear to be related to Utility Diversions, there is a proposal that **60m of tree clearance will take place along the A2 border of the Shorne Woods Country Park** causing loss of many very mature trees. This will destroy the ambience and landscape of the Park, while creating greatly increased noise and air pollution. We object strongly to this proposal.

***The proposed loss of trees must be reviewed and any loss either prevented or minimised. The proposals in totality are deplorable and unacceptable, to fell so many trees in what are supposed to be protected land designation areas.***

## **2.9 UTILITIES DIVERSIONS**

The need for some Utilities to be diverted was obvious from the start of the proposals, but the massive expansion in quantity and extent and the amount of consequent land take and environmental damage now suddenly proposed is shocking. Instead of passing through/destroying Ancient Woodland, we see no reason why these Utilities cannot be located beneath carriageways.

We were told at the Consultation Event that the double line of gas pipes shown north of the A2/M2 is actually only a single pipe with alternative routes shown but we would like that to be confirmed.

We had commented previously that residents are unhappy about the relocation of electricity pylons and lines in the Shorne West/Riverview area. We had requested that their locations should be reviewed because they appear to be located closer to housing than they need to be, but there has not been any change. We note that there will only be a single pylon at Claylane Woods however a 75m unit is proposed, which will have increased landscape impact.

***We would like the question about the electricity pylons to be addressed and an explanation provided as to why the extent particularly of gas pipes diversion has only been revealed now in a supplementary consultation when the existence and location of the pipes must have been known from the start.***

***See also previous point about unacceptable loss of Ancient Woodland and SSSI's.***

## 2.10 CHALK PARK AND THE ELECTRICITY SUBSTATION

This “Informal Public Space” is presented as a great Community Asset that is being provided by the project, but it is then being significantly compromised by the sudden and unwelcome introduction of a massive (50m by 50m) electricity substation, which is unlikely to be a thing of beauty. It is surprising that the need for such a large structure was never mentioned before. This will immediately spoil the proposed Park where it is relatively narrow, and will compromise the rural setting of Chalk Church.

We need to see proposed landscaping solutions before giving a final opinion but at present we prefer the Option 2 location as it can then share the LTC emergency access road.

***Consideration should be given to whether this installation really has to be in this location, and the maximum amount by which it could be buried or landscaped out of view.***

## 2.11 ADDITIONAL BUILDINGS/STRUCTURES; TUNNEL ENTRANCE

During the previous consultations, we were told that all tunnel associated structures would be underground/buried. This specifically related to pumping stations and any tunnel control building, which we were told would be north of the river.

No other installations were mentioned so the arrival of the massive (50m by 50m) electricity substation into our landscape has been a severe shock.

However, the documents now refer to “**permanent above ground infrastructure**” and the “**southern tunnel entrance building**” – clarification is needed over what this is and where it is to be located. Is it to be buried underground at the entrance as we had been told or will another large structure or multiple structures also suddenly appear on the next plans?

We note that there is a long side road on the east side of the LTC at the tunnel entrance, we would like an explanation as to the purpose of this.

***If there are to be any other buildings or structures associated with the LTC then we need to be explicitly informed about them, why they are needed and how they are going to be landscaped.***

## 2.12 ECOLOGICAL CONNECTIVITY

We did not notice any specific mention of local formal arrangements such as wildlife tunnels. We have been pushing for there to be very wide “Green Bridges” in order to facilitate ecological connectivity as otherwise the countryside north of the A2 will become sterilised of wild animals, to its detriment.

***We would like to see formal discussion about how wild animals will be facilitated to safely cross the lines of the LTC and the widened line of the A2/M2.***

## 2.13 CONSTRUCTION

We are unhappy about some aspects of the proposed construction site/processes:

- The plans show a temporary construction compound north of the A226, between Church Lane and Castle Lane. This causes **concern about the nature of proposed activities in the Chalk part of the Construction Compound** and potential for consequences to fresh groundwater flow and incidents of pollution to the North Kent Marshes SPA and the Ramsar Site.



- **Having the works compound split across the A226 could cause traffic problems** if traffic has to be stopped for plant etc to cross.
- Where the construction compound abuts residential housing, particularly in the Thong Lane area, **protective bunds, fences and plantings must be put in place well before works commence.**
- **Works on the two A2 overbridges** (Thong Lane and Brewers Road) requiring closure must not be undertaken simultaneously.
- **Construction traffic routes for the Ground Preparation Tunnel (Area B South?)** are shown as being via residential roads (Lower Higham Road etc) and for up to two years duration. This is not an acceptable route so other routes should be considered and substituted.
- **Working hours** - There is general concern that proposed working hours are too long (e.g. effectively between 6am and 11pm for earthworks in the summer), especially having taken account of additional preparation and closedown time and where close to houses.
- The significant **widening of the Emergency Access road** to 12m is noted. It seems to have now become quite a major roadway. It needs to be landscaped and should not be illuminated in darkness except when in emergency use.

### **SECTION 3: TRAFFIC ISSUES**

We commented at length in our 2018 submission about the predictable effects of the LTC proposals: lack of capacity for increased traffic on the A2 and M2, the outcome of increased congestion and reduced speeds, the effect on already compromised local A roads and junctions (including routes traversing between the A2/M2 and M20), the effects on local roads, the deficiencies of the traffic data and modelling, the lack of local and network resilience and other issues.

***Please see our previous submission as it does not appear that there have been any significant changes.***

What has changed however since the 2018 consultation is that there has been a continuation of the inexorable rise in traffic volumes on the A2 and M2, fuelled by the increase in housebuilding locally that has already taken place. Local information is that there is going to be considerably more housebuilding locally and on the Hoo Peninsula, yet Governmental housing targets are not being factored into the proposals, which is the opposite of properly planning for future needs.

Due to the high-level and very retrospective nature of both the available data and the computer modelling, there is a paucity of useful information about the effect on local roads and the nearby road networks and yet these are the aspects that local residents most want to know about - how their lives will be affected. The diagrams presented in the new documents are difficult to understand and appear at times contradictory however some again suggest significant traffic increase on unsuitable or residential roads such as Pear Tree Lane and Shorne Ifield Road, and through Shorne Village.

***We would like to see integral or Legacy projects to install traffic calming in Parish areas that are anticipated to suffer an inappropriate increase in traffic due to the LTC project. Management of predicted and integral traffic consequences needs to be addressed in advance by the scheme not ignored to be addressed later, in case there might not be a viable solution.***

Once again, our ability to comment on the traffic data and modelling is impaired by our being unable to get access to the detailed data, as was alluded to in the introduction. At the Consultation Events we were told that HE could not give us data even about our own Parish as that would be lack of

even-handedness on their part. We were told that we could obtain the information from GBC or KCC, but instead found that, as in the previous consultation, those organisations had been bound by “Gagging Clauses” that had been imposed by HE, which they considered prevented sharing of detailed local traffic data.

***We regard this refusal to provide data as being incompatible with a proper mode of consultation.***

We reiterate (updated) our previous summary comments:

***Local villages and recreational areas need to be protected from safety hazards arising from increased traffic and rat-running. We do not consider it acceptable that the project plans to increase traffic through villages without also planning in suitable protective solutions.***

***The traffic modelling should focus on and give consideration to the adverse effects in the receiving area of the LTC and not just on distant and imaginary benefits. Local traffic data should be published, as it is factual information we can see no reason why this should be restricted.***

***All possible scenarios of contingency/resilience planning and modelling should be included in all future Consultation materials and taken into account prior to making the decision on viability and whether to proceed with the project.***

***Local residents and those of North Kent as a whole have a lack of belief in the traffic data that is presented and fear that they will be left by HE to flounder with adverse consequences of this project that are actually completely predictable.***

#### **SECTION 4: ENVIRONMENTAL ISSUES**

The PEIR remains preliminary and theoretical/aspirational. We are aware that some environmental studies are still on-going but these are being undertaken very late given that the DCO application is said to be only a few months away. The main message provided by the Environmental Impacts Update document is to re-confirm how awful the whole project is going to be for local residents.

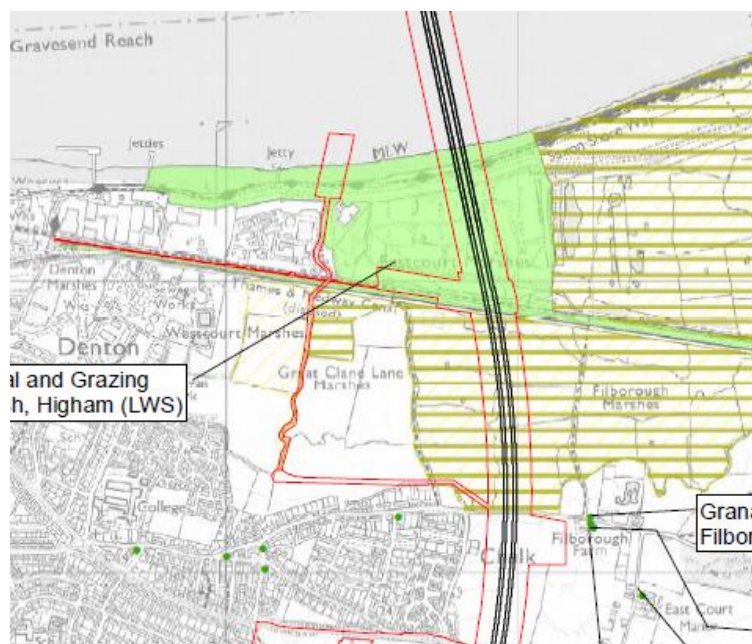
As we cannot comment on information that has not been provided to us, we are unable for example to say anything about issues of major local concern such as increases in air and noise pollution. Proper modelling contour maps are needed for these, also showing any positive effects of the proposed attenuation measures.

The following is therefore just a selection of issues highlighted by the latest documents.

##### **4.1 “OPERATIONAL EFFLUENT” DRAINAGE; INTERFERENCE WITH GROUNDWATER FLOWS AND WATER SUPPLY TO THE NORTH KENT MARSHES SPA AND RAMSAR SITE**

We commented previously about the discharge pipe that is shown within the Red Line Boundary and linking to the River Thames. Like many other parts of the proposals, this aspect is showing creeping expansion and therefore causing mounting concern.

Over the last few iterations of the LTC project, an L-shaped ditch formation west of the LTC line has been shown included within the red line boundary. We have asked repeatedly what this is supposed to be for and how it will be used, receiving no clear answers.



In the latest plans there is more discussion, of this being used for “operational effluent” during tunnel construction and then operationally. There is also discussion of damage being deliberately done to the river foreshore and intertidal area. Much more information is needed about the tunnel associated groundwater management, discharge processes and routes, especially of “operational effluent”.

We have repeatedly pointed out several major concerns about these proposals:

- It is unclear how this route would be used, whether proposed as an open watercourse or if a pipe will be laid along it (but assumed sunk into the water).
- The proposed drainage use would have to cross the North Kent Railway Line embankment and the Thames and Medway Canal, the latter being full of water at this location. It is not clear how this could be achieved without damaging either/both of these.
- There is also risk of damaging the Estuarine water environment in what is supposed to be a candidate Marine Conservation Zone.

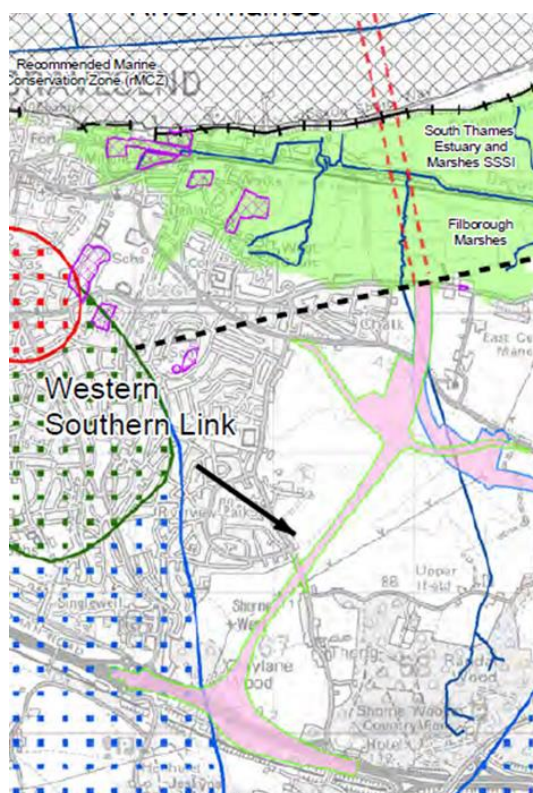
Overall, the water flows in the area are complex. In our previous submission we commented, based on the map that was in the 2016 consultation documents (see below), that the water supply to the North Kent Marshes SPA and the Ramsar Site arises in the higher ground in the Shorne Woods Country Park area and intervening farmland and drains northwards into the marshes. Many of the surface streams are seasonal, drying up in the summer, but some are permanent particularly that which passes Ifield Place Farm and then sinks. Its subsequent direction of flow is shown on the map as moving diagonally to the north west to pass between Chalk Church and Chalk Village, a route that will be transected by the LTC.

Our concern is that the 2016 map (and effectively all equivalent plans since) shows the LTC cutting across the line of this watercourse. The map was within the 2016 documentation but has not been included again since. We continue to have significant concerns about the possibility of interruption to/contamination of groundwater flows into the marshes.

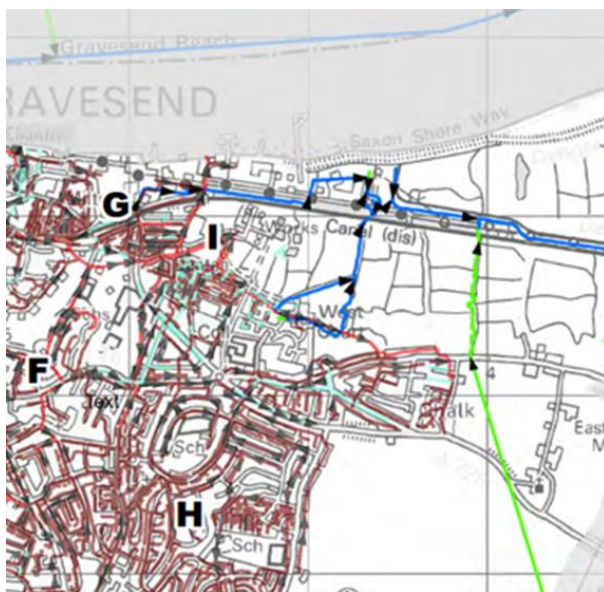
We stated in our previous submission that better understanding is needed about how the fresh water supply to the marshes is provided as the project must not interfere in any way with these or risk damaging the Ramsar site.

An update on the information that we have is as follows:

- a) Flow tests were undertaken on behalf of HE in the area between Chalk Church and Chalk, Gravesend Road to Marshes. These were done in the summer when the land was relatively dry but nevertheless we understand that the results showed a high amount of water flow. This would seem to confirm that the water is coming from a significant volume, permanent watercourse.
- b) It is possible that water is also flowing down topographical valleys from Shorne West down to between Chalk Church and Chalk etc and on to the marshes, which is also a route that the LTC will transect.
- c) HE's published map (Ref HHJ-EGN-CD3ZZZZZEG-MP-EN-0002, from the 2016 Pre-Consultation Scheme Assessment Report, Volume 6: Environmental Appraisal, Section 10 Appendices, page 23) shows a significant underground stream originating in Shorne Woods Country Park, via Ifield Place Farm and then underground on to between Chalk Church and Chalk and then the marshes.



- d) We are aware that Southern Water undertook studies about 18 months ago on the similar Swillers Lane stream and we presume they also did so for that at Ifield Place Farm. We would like assurance that HE have this information and would like to see these results that confirm the previously mapped flows.
- e) The base map for the HE drawing is on the KCC website. It shows the direction of water flows, an important aspect which was omitted from the HE publication. This shows, as would be expected for a marsh, that the predominant directions of water flow are that: south of the railway line and canal water is flowing from south to north, and north of the railway line and canal it flows north to south, i.e. the opposite direction to the proposed LTC water discharge. Apart from other issues, clarification is needed as to the compatibility of the directions of flow with the LTC drainage proposal. These directions of flow are important to the health of the SPA and the flows cannot be disturbed or reversed.



- f) In earlier times, e.g. as seen on the 1684 map of the marshes, the relevant ditch was called a sewer (later Eastcourt Sewer, sewer in this context meaning draining the adjacent land). This conveys that it cannot be interfered with without affecting water drainage and flows.
- g) On other maps it is referred to as the "Ramsar Ditch". The official map of the Ramsar Site shows that this ditch is so called because it is a registered part of the Ramsar Site. The inclusion of the ditch strongly suggests that it is critical to the functioning of the Ramsar site, hence it cannot be used for the purposes suggested or interfered with in any way.

#### Thames Estuary and Marshes

Country:	United Kingdom of Great Britain and Northern Ireland
Site number:	1025
Area:	5,589 ha
Designation date:	05-05-2000
Coordinates:	51°28'N 00°34'E



***The Marshes have a complex ecosystem, with a delicate balance between freshwater from the land versus saline seepage from the tidal Thames. The LTC cannot transect a main water supply***



***route for the marshes, which are SPA and Ramsar protected, as that would inevitably damage the freshwater/groundwater supply to the marshes.***

***We have raised questions several times but not received a satisfactory answer, as to how it is possible that the LTC will not damage this vital freshwater supply. We are alarmed that we have seen no evidence of concern being expressed publicly by any of the National bodies who should be most involved in ensuring that the Ramsar Site and SPA are not deliberately damaged by this project. We would like to be assured that they are actively involved. The proposed drainage arrangements both during construction and in LTC operation must be reviewed. Instead of what is proposed, the required drainage systems should be incorporated in the build of the tunnel itself rather than risk negative effects on water quantity and quality in the SPA and Ramsar Site.***

#### **4.2 THE “GROUND PREPARATION” TUNNEL; DEWATERING**

It is now newly proposed that there will be construction activities taking place under the marshland of the SPA and Ramsar Site. A “ground preparation” tunnel is planned in order to prepare the marsh for the main tunnelling processes. This causes us deep concern about what is proposed. **The location appears to be directly under one of the main freshwater supply routes to the marsh.** We have the following questions and comments that were not fully answered at the Consultation Event:

- **We request details of other projects** that have successfully used the described methodology for tunnelling under a marsh, and what were the outcomes for the overlying land. We are aware that the HS1 tunnelling at Ebbsfleet has caused the overlying marsh to dry out.
- **We would like to know what alternative proposals have been evaluated and the results.** An obvious means to avoid having to undertake the ground preparation works would be to make the main tunnel longer while remaining wholly in the chalk layer and we would like to have further information about this possibility.
- Injection of “grout” is proposed. **We would like to see the results of the detailed evaluation** that proves that these chemicals (and the concrete foam suggested to be used for backfilling) are not in any way toxic to plants or animals. Assurance is needed on this.
- **We would like to see the results of the evaluation** that confirms that there will not be any impact on surface water and water supply and drainage.
- The documents refer to water being pumped out of the chalk layer, it is unclear if this is just for construction or permanently, but it obviously poses a clear risk to the overlying lands and structures.

***We are very concerned about the overall potential for damage to the groundwater of the marsh that may be caused by works in general and the ground preparation tunnel in particular.***

#### **4.3 CHANGES TO LANDSCAPING AND “MITIGATION”**

- **Environmental Mitigation for Thong Village** – We requested previously that this should be maximised, the same on the east side of the LTC as on the west but this aspect remains weak.
- **Hedgerows** - We requested previously that there should be greater protection for Thong Village and plenty of hedgerows yet the documentation states that the "hedgerow improvement strategy to reflect historical field patterns" is no longer being taken forward. It is unclear how this decision was made and by whom. This needs to be clarified as there has been no discussion with local residents.
- **Taking of paddocks and grazing areas** - There are several residents who keep horses on land that is being taken for mitigation. This has a very detrimental effect on lives of residents even if their houses remain untouched. We see no reason why paddocks could not be located within the

mitigation areas as seeing the grazing horses during walks etc will augment the residual countryside ambience.

- **Changes since previous Consultation** - We are puzzled that the Environmental mitigation in Shorne West has apparently changed from wooded areas to open grassland and we are unclear how and why this has happened. If confirmed, this change needs to be largely reversed.
- **“Environment and Community Group forum”** - We recently became aware that there is a group that has been meeting that is called the “Environment and Community Group forum”. It appears to have been providing input to landscaping without reference to local residents. That may help explain the otherwise inexplicable changes that have taken place. This group is referred to as being composed of “stakeholders” but seems to be a group comprised of national organisations, possibly with higher level vested interests. We note that it has no Community representatives so at the least the name should be changed. We consider that such a group cannot be allowed to override the environmental protection needs of local residents.
- **Influence of local landowners** – We would also like to express concern that there can be conflicts between the needs of local residents seeking maximum protection and mitigation and those landowners who may seek to promote their own interests (meaning desire for development on Green Belt land) perhaps to the detriment of local residents.
- The proposal to **build a new hill out of spoil** northwest of Cascades is noted, it is unclear why this site has been chosen as it apparently requires relocation of the “Pitch and putt” course.

***The aims of and for local residents should be paramount – to have maximum protection from LTC generated visual, noise and air pollution. Residents tell us that they “don’t want to see it, hear it or smell it” and want there to be a wide, thickly wooded (with bushes and thickets) fringe along the entire line of the LTC. There need to be walking, cycling and riding paths within mixed open and wooded areas infilling the entire area other than Cascades.***

Some of the points we made previously warrant repeating in this submission:

- Areas of landscaped plantings must be permanent, with land ownership vested in bodies other than local authorities (meaning GBC and KCC) whose unachievable housing targets may lead to conflicts of interest. The area should have Planning Conditions imposed to ensure that the mitigation land is permanent and cannot subsequently be developed.
- The landscape mitigation areas include some areas of existing valuable wildlife habitat including hedges and rough scrub, these should be retained as much as possible rather than being bulldozed and replanted. Areas such as the former chalk pit on Muggins Lane by Ifield Place need careful consideration due to roosting bats.
- Plantings should as much as possible be of large/sufficiently mature trees and bushes rather than twigs that will spend decades struggling to grow.

***Plans for mitigation need to be refined with greater detail and in more protective locations, with more mature trees and hedges. Mitigation areas must be safeguarded from future development.***

## **SECTION 5: CONCLUDING COMMENTS**

Our concluding comments are broadly similar to those we made in 2018:

Highways England’s latest version of their Lower Thames Crossing proposals will take a huge amount of land in Shorne Parish, land that is “Green Belt” and therefore supposedly protected from development. Parts of SSSI’s and Ancient Woodland, and Shorne Woods Country Park are to be

directly destroyed and the North Kent Marshes and Ramsar site are being threatened with dewatering and pollution. Both of the latter outcomes seem unavoidable should the project go ahead. The tranquility of the area will be permanently damaged as will the lives of residents by air, noise and light pollution and loss of/degradation of their clean air and recreational areas.

This project will cost billions of pounds yet will not solve the traffic congestion and air pollution problems at the Dartford Crossing and surrounding area that were said originally to be the major impetus for the project - perhaps it is time for that pretence to be ended. The LTC as proposed will also be unable to provide practical resilience to the M25/A282, particularly for traffic moving in the south-north direction. It is surprising that, with the LTC:A2 junction, the adjacent link roads and many other aspects having so greatly expanded, and so many other additions now appearing, that the costs are said not to have increased.

The proposals will increase traffic on local motorways, A, B and minor roads. The adverse impacts on local villages and residents' lives seem to be recognised but are not being minimised or adequately addressed as an integral part of the project.

Traffic volumes are already too high in the North-West Kent area, particularly on the A2 and the M2 between junctions 1 and 3, in both directions, for the project to be functional. There are already very large planned increases in residential and commercial building development (including at Bluewater and the possible London Resort) in the area which will further increase traffic before the LTC can open. The LTC itself will then attract even more traffic onto the already congested and compromised A2 and M2.

Overall, we remain unconvinced that this area immediately to the east of Gravesend is the right location for any "Option C" strategic crossing of the Thames. This location will not achieve the (flawed) core objectives of the project or ultimately deliver a crossing that will actually work in practice.

The present Supplementary Consultation just demonstrates ever more convincingly that there isn't enough physical room available in which to properly design and build the very complex junction with the A2 plus the additional link roads and that the already dire local traffic will be made even worse. Large projects like the LTC can develop a life of their own - a "reality check" needs to take place soon, before even more public money gets wasted.

*Councillor Susan Lindley,  
Chair of Planning and Highways Committee  
On behalf of Shorne Parish Council  
2<sup>nd</sup> April 2020*